WHAT IS CLAIMED IS:

1. A method for providing high availability and redundancy in communication between an endpoint at a terminating side and an endpoint at an originating side in a packet switched network, said network being virtually divided into horizontal layers comprising a number of nodes, wherein a plurality of said nodes are associated with said terminating side and a plurality of said nodes are associated with said originating side, nodes within the same layer associated with the same side said to be peers and holding relevant information about each other, each node within each layer, in addition to the endpoints, being connected to at least all peers of adjacent layer(s) within the same side respectively, the method comprising the following steps, executed at each side respectively prior to said communication:

sending a first message vertically by the endpoint associated with the current side from one of said nodes within the horizontal layer adjacent to said endpoint to one of said nodes within a higher horizontal layer passing through one of said nodes within each intermediate layers;

for each passed node, adding relevant information concerning current node and its peer(s) to said first message;

upon receiving said first message, storing said relevant information for each passed node and its peers included in said first message in said node within the higher layer;

in response to said first message, sending a second message in the opposite direction from said node within the higher layer to said endpoint passing through said nodes of said intermediate layers, said second message always containing the relevant information of the previously passed node and its peer(s); and

in each node and in the endpoint, storing the relevant information of the previously passed node and its peer(s) when receiving said second message.

2. A method as defined in claim 1, wherein the step of sending a first message by the endpoint relates to user registration, and the step of sending a second message from said node within the higher layer relates to confirmation thereto.

3. A method as defined in claim 1, wherein said relevant information is one or more address(es), and said relevant information provided from said first message stored in the higher layer is an address list of the peers for each layer.

4. A method as defined in claim 1, wherein said horizontal layers include an access layer comprising access nodes handling access specific services, a network layer comprising network nodes handling routing and network Quality of Service, a transit layer comprising transit nodes for traversing firewalls, a user layer comprising user nodes for handling user specific events as user registration, and a service layer comprising service nodes for handling service specific events, said horizontal layers arranged in the above-mentioned order.

5. A method as defined in claim 4, wherein said access layer is the lowest one and adjacent to the endpoint, and said service layer is the highest one.

6. A method as defined in claim 4, wherein said higher layer is the user layer.

7. A method as defined in claim 4, wherein there are at least two peers per layer at each side.

8. A method as defined in claim 3, wherein more than one of said addresses may be associated with a single node.

9. A method as defined in claim 1, wherein said originating side and said terminating side are connected to each other through a redundant coupling between the user nodes and the network nodes at each side.

10. A method as defined in claim 3, further comprising utilizing the stored addresses of the peers of the next layer provided by said second message for routing packets or other messages involved in said communication from a current node in the vertical direction away from associated endpoint.

11. A method as defined in claim 3, further comprising utilizing the address list stored in said higher layer for routing packets or other messages involved in said communication in the vertical direction towards associated endpoint by adding said address list to said packets or other messages when passing said higher layer and, thereby, finding a proper route to said endpoint.

12. A method as defined in claim 10, further comprising if a node to which one of said packets or messages otherwise would have been routed is down, routing said packet or message to one of the peers of said node.

13. A method as defined in claim 1, wherein said communication initiates some kind of service.

14. A method as defined in claim 13, wherein the service is a call.

15. A method as defined in claim 13, wherein the service is a call set-up.